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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,346	07/30/2001	Daniel B. Clifton	00100010065	2686

7590

02/16/2005

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EXAMINER

MAI, TAN V

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,346

Applicant(s)

CLIFTON, DANIEL B.

Examiner

Tan V Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 3-8, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Noetzel.

Rejection grounds continue to be those set forth in the previous office action (Paper No. 06022004, paragraph 7).

3. Claims 2, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable Noetzel in view of Nakayama.

Rejection grounds continue to be those set forth in the previous office action (Paper No. 06022004, paragraph 9).

4. Applicant's arguments filed on 05-28-03 have been fully considered but they are not persuasive.

Applicant, in his remarks, argues two **major** points that:

(1). "[A]s best understood, Noetzel appears to teach that the memory unit 7 contains coefficients A0. . .AD that are output to multipliers 35, 37 and 39 (see for example, column 6, lines 6-20). However, Applicant's claim 1 and 8 for example require, among other things, point values stored in memory and slope values stored in memory and providing a suitable point value and slope value based on the first portion of an input mantissa. Each stored slope value is based on a Lagrange polynomial approximation of a function. The cited reference appears to merely store coefficients in the memory unit 7 and appears to teach a different structure. Accordingly, the claims are in condition for allowance", and

(2). "[I]n addition, claim 14 requires, among other things, memory containing a plurality of point values and a plurality of slope value and means for providing a point value that is stored in the memory

and means for providing a slope value stored in the memory to a means for combining. The slope values that are stored in memory are based on a Lagrange polynomial approximation of a function. The combiner then combines the point value the slope value, both stored in the memory and the second portion of the input mantissa to provide the output mantissa. Such structure does not appear to be taught or suggested by the cited portion of the reference and as such, these claims are also believed to be in condition for allowance" (emphasis added).

With respect to the arguments, the examiner carefully reviews all the applied references and the claimed invention. The examiner believes that Noetzel teaches, e.g., see Figs. 1 and 4-5, the claimed invention. They are: (1) a point value "a0" (element 9 of Fig. 1), (2) at least one slope value [e.g., "the products of "a1-ad" & "multipliers" (35-39)] and (3) the combining of the point value, the at least one slope value and the second portion of the input mantissa ("lower order bits" 81, see Fig. 5, is considered the claimed "second portion of the input mantissa). It is noted that Noetzel does show Lagrange polynomial approximation feature (e.g. see col. 9, lines 17-31). It is clearly that the independent claims read on Noetzel. Therefore, the rejections are still proper.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



TAN V. MAI
PRIMARY EXAMINER